



US-1520

SEQUENCE LISTING

<110> Ajinomoto Co., Inc.

<120> Method for Producing Target Substance by Fermentation

<130>

<150> JP 2002-203764

<151> 2002-07-12

<160> 32

<170> PatentIn Ver. 2.0

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<223> Description of Artificial Sequence: primer for
amplifying Escherichia coli arca gene

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<223> Description of Artificial Sequence: primer for
amplifying Escherichia coli arca gene

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<223> Description of Artificial Sequence: primer for
sequencing of Escherichia coli arca gene

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<213> Artificial Sequence

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<210> 9
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<223> Description of Artificial Sequence: primer for
amplifying Escherichia coli fnr gene

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<220>
 <223> Description of Artificial Sequence: primer for sequencing of Escherichia coli suCA gene

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 <223> Description of Artificial Sequence: primer for amplifying Escherichia coli suCA gene

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<210> 17
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 <223> Description of Artificial Sequence: primer for
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 <222> (41)..(757)

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 Ile Leu Ile Val Glu Asp Glu Leu Val Thr Arg Asn Thr Leu Lys Ser
 10 15 20
 att ttt gag gcg gaa ggt tat gtc gtg tac gaa gcg acc gat ggt gca 151
 Ile Phe Glu Ala Glu Gly Tyr Val Val Tyr Glu Ala Thr Asp Gly Ala
 25 30 35
 gag atg cac cag gtg ttg acc gac aat gat gtc aat ctg gtt att atg 199
 Glu Met His Gln Val Leu Thr Asp Asn Asp Val Asn Leu Val Ile Met
 40 45 50
 gac atc aat ctg ccg ggt aaa aac ggc ctg tta ctg gca cgt gaa ctg 247
 Asp Ile Asn Leu Pro Gly Lys Asn Gly Leu Leu Leu Ala Arg Glu Leu
 55 60 65
 cgt gag caa gcc aat gtc gca ttg atg ttc ctg acc gga cgc gat aac 295
 Arg Glu Gln Ala Asn Val Ala Leu Met Phe Leu Thr Gly Arg Asp Asn
 70 75 80 85
 gaa gtc gat aaa att ctt ggg ctg gaa att ggt gca gac gac tac att 343
 Glu Val Asp Lys Ile Leu Gly Leu Glu Ile Gly Ala Asp Asp Tyr Ile
 90 95 100
 act aag ccg ttt aac cca cgc gaa tta act att cgt gca cgt aac ctg 391
 Thr Lys Pro Phe Asn Pro Arg Glu Leu Thr Ile Arg Ala Arg Asn Leu
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 ctg ttg cgc acc atg aat ttg cct tta ccc aat gaa gag cgt cgc cag 439
 Leu Leu Arg Thr Met Asn Leu Pro Leu Pro Asn Glu Glu Arg Arg Gln
 120 125 130
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 Val Glu Ser Tyr Lys Phe Asn Gly Trp Glu Leu Asp Ile Asn Ser Arg
 135 140 145
 tca ctc atc aat ccc aac ggt gag cag tac aaa ctg ccg cgc agt gag 535
 Ser Leu Ile Asn Pro Asn Gly Glu Gln Tyr Lys Leu Pro Arg Ser Glu
 150 155 160 165

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 <212> PRT
 <213> Pantoea ananatis

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Leu	Pro	Arg	Ser	Glu	Phe	Arg	Ala	Met	Leu	His	Phe	Cys	Glu	Asn	Pro	
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Gly	Lys	Ile	Gln	Thr	Arg	Ala	Asp	Leu	Leu	Lys	Lys	Met	Thr	Gly	Arg	
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Asp	Leu	Lys	Pro	His	Asp	Arg	Thr	Val	Asp	Val	Thr	Ile	Arg	Arg	Ile	
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 <212> DNA

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for amplifying ori6K and mobRP4 gene

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<210> 22

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer for amplifying ori6K and mobRP4 gene

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<210> 23

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for amplifying Chloramphenicol resistant gene

<400> 23

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<210> 24

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for amplifying Chloramphenicol resistant gene

<400> 24

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<210> 25

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for amplifying kanamycin resistant gene

<400> 25

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<211> 29		
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<223> Description of Artificial Sequence: primer for amplifying Pantoea ananatis arCA gene		
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<223> Description of Artificial Sequence: primer for
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<212> DNA

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<222> (101)..(817)

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Met Gln Thr Pro His
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att ctt atc gtt gaa gac gag ttg gta aca cgc aac acg ttg aaa agt 163
Ile Leu Ile Val Glu Asp Glu Leu Val Thr Arg Asn Thr Leu Lys Ser
10 15 20
att ttc gaa gcg gaa ggc tat gat gtt ttc gaa gcg aca gat ggc gcg 211
Ile Phe Glu Ala Glu Gly Tyr Asp Val Phe Glu Ala Thr Asp Gly Ala
25 30 35
gaa atg cat cag atc ctc tct gaa tat gac atc aac ctg gtg atc atg 259
Glu Met His Gln Ile Leu Ser Glu Tyr Asp Ile Asn Leu Val Ile Met
40 45 50
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Asp Ile Asn Leu Pro Gly Lys Asn Gly Leu Leu Leu Ala Arg Glu Leu
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cgc gag cag gcg aat gtt gcg ttg atg ttc ctg act ggc cgt gac aac 355
Arg Glu Gln Ala Asn Val Ala Leu Met Phe Leu Thr Gly Arg Asp Asn
70 75 80 85
gaa gtc gat aaa att ctc ggc ctc gaa atc ggt gca gat gac tac atc 403
Glu Val Asp Lys Ile Leu Gly Leu Glu Ile Gly Ala Asp Asp Tyr Ile
90 95 100
acc aaa ccg ttc aac ccg cgt gaa ctg acg att cgt gca gcg aac cta 451
Thr Lys Pro Phe Asn Pro Arg Glu Leu Thr Ile Arg Ala Arg Asn Leu
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Ser Leu Ile Gly Pro Asp Gly Glu Gln Tyr Lys Leu Pro Arg Ser Glu
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ttc cgc gcc atg ctt cac ttc tgt gaa aac cca ggc aaa att cag tcc 643
Phe Arg Ala Met Leu His Phe Cys Glu Asn Pro Gly Lys Ile Gln Ser
170 175 180
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<212> PRT

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Ala	Asp	Asp	Tyr	Ile	Thr	Lys	Pro	Phe	Asn	Pro	Arg	Glu	Leu	Thr	Ile	
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	225				230					235						